**Before the**
**FEDERAL COMMUNICATIONS COMMISSION**
**Washington, D.C. 20554**

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| In the Matter of | ) | |
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| Petition of National Public Safety | ) | |
| Telecommunications Council for Rulemaking | ) | WT Docket No. 09-217 |
| To Make 900 MHz Narrowband | ) | |
| PCS Channels Available for Public Safety Use | ) | |

To: Chief, Wireless Telecommunications Bureau

**COMMENTS OF SENSUS USA, INC.**

Sensus USA Inc. ("Sensus") respectfully submits these Comments in response to the Petition for Rulemaking of the National Public Safety Telecommunications Council (NPSTC). The Petition requests that the Commission audit 900 MHz narrowband PCS (NPCS) spectrum, amend FCC rules to reallocate NPCS channels to public safety use, and permit public safety entities to roam on commercial NPCS systems when outside their respective jurisdictions.

Sensus supports the Petition to the extent it seeks waiver of any Commission rule that may prohibit a public safety entity from using spectrum in services other than the public safety service or that may prohibit or impede a public safety entity from receiving assignment of a license or leasing spectrum. Sensus opposes the Petition to the extent it seeks confiscation of Sensus' FCC licenses, for which Sensus paid substantial amounts and that are central to Sensus' business plan.

**Background of Sensus**

Sensus is a leading global supplier to the utility industry with approximately $900 million in annual revenues and approximately 4000 employees at over 40 locations on five continents. Sensus is also a leader in Smart Metering and Smart Grid systems, with over 3 million smart endpoints installed in 36 states over the past three years in the United States.

Sensus' Smart Grid electric utility installations cover large investor owned utilities as well as rural and membership cooperatives, public utility districts and municipal utilities. Sensus' electric utility customers in the United States include Southern Company, Alliant Energy, Portland General Electric, NV Energy, Hawaiian Electric, Jackson EMC, Sawnee EMC, Cobb EMC, Talquin Electric Cooperative, Benton PUD, Clark Public Utilities and the city of Danville, VA. In addition, Sensus has provided similar Smart Metering and Smart Grid systems to over 30 electric distribution utilities in the province of Ontario, Canada.

Sensus also is the leading global supplier of water meters and a leading gas meter supplier in North America. Sensus currently has over 100 projects completed or underway in the United States to provide Smart Meter communications systems for gas and water distribution utilities utilizing the same technology that is used for electric utility Smart Grid applications. Typical water and natural gas distribution customers include Atmos Energy (natural gas distribution utility operating in 12 states including Texas, Louisiana, Arkansas and Colorado), Westview Water (a water distribution utility with 50,000 meters covering the suburbs north of Pittsburgh, Pennsylvania), and St. Johns County, FL with 20,000 water meters.

Sensus' business model in the United States is to sell its FlexNet networking and metering equipment to a utility customer, to provide the licensed spectrum for the customer to operate over by selling an NPCS or multiple address system (MAS) license or leasing the spectrum to the utility (subject to prior FCC approval), and to provide ongoing smart grid and metering services and consulting support to the utility. Sensus differentiates itself from competitors by, among other things, utilizing auctioned, exclusive-use spectrum licensed by the FCC. Sensus' wholly owned subsidiary, Sensus Spectrum LLC, is a Commission licensee, holding over 800 NPCS and MAS licenses. Sensus paid substantial amounts of money to acquire its FCC licenses. Sensus advertises to customers and prospective customers that it

operates on exclusive-use frequencies licensed by the FCC and that this provides better protection from interference than utilizing free, unlicensed bands where Sensus' competitors operate.

Sensus invested even more substantial sums in technology, equipment and access to manufacturing facilities. Part of Sensus' calculation was that unimpeded access to exclusive-use frequencies (heretofore assured by the FCC licenses) justified the substantial investment in high-performance technology and equipment. Sensus is not alone in having made this calculation, as numerous other wireless providers also made and continue to make substantial investments in technology, equipment and facilities, all premised on predictable and exclusive access to spectrum.

Sensus believes that the Petition does not paint the correct picture of NPCS spectrum use. It is true that paging companies are steadily losing customers to cellular and PCS providers, as stated in the Petition. However, machine-to-machine use of NPCS spectrum (like Sensus' smart grid and metering applications) has mushroomed. Sensus believes that today there are approximately two times as many machine-to-machine devices operating on NPCS spectrum as there were pagers at the height of paging usage.

## I. THE PETITION CAUSES UNCERTAINTY AND ROILS THE MARKET

A key issue for Sensus' utility customers is whether the licensed spectrum will always be available during the useful life of smart grid equipment purchased from Sensus. The Petition and the FCC's public notice could be misunderstood as calling into question the stability of NPCS licenses that are in current use and in full compliance with FCC rules and raises uncertainty with respect to FCC rules regarding license term and renewal expectancy.,

The Petition's effect of causing uncertainty and roiling the market is contrary to the Commission's heretofore very successful wireless licensing regime. The Commission has put in place and abided by a predictable set of rules regarding auctioned spectrum, i.e., providing for exclusive use, protection from harmful interference, and, most importantly, license term, and license renewal

expectancy. Consequently, the wireless industry has invested billions of dollars in spectrum "purchases" from the United States government and additional billions in building extensive infrastructure in wireless networks. This money was spent predicated on certainty and predictability of the legal and regulatory regime for U.S. spectrum. Were the Commission to seriously entertain a proposal to introduce uncertainty or lack of stability in any part of wireless licensing, it would undercut the Commission's licensing regime and disappoint the reasonable expectations of countless wireless licensees.

## II. THE CITY OF RICHMOND SHOWS THAT THE FCC'S SPECTRUM ALLOCATION SYSTEM WORKS AND DEMAND MAY NOT BE AS GREAT AS SUGGESTED BY THE PETITION

### A. No change is needed because the current spectrum allocation system works.

The City of Richmond's system, highlighted in the Petition, provides a valuable case study. The City of Richmond's system operates on NPCS Channel 16, which previously was licensed under call sign KNKV222. KNKV222 was a regional license, authorizing NPCS operation in Region 2, the Southern Region, which includes most or all of Florida, Georgia, South Carolina, North Carolina, Virginia, Maryland, Kentucky and Tennessee, as well as small portions of Indiana and Illinois. KNKV222 terminated in 2000 because the licensee did not construct. The City of Richmond applied to the FCC to use Channel 16 in the area of Richmond, Virginia, and sought a rule waiver. In July 2006, the Wireless Telecommunications Bureau (Bureau) placed on public notice the City of Richmond's petition to use some of NPCS Channel 16 for a regional public safety system. The Bureau subsequently granted the petition. In December 2006, the Bureau granted the City of Richmond a license, call sign WQGD367, authorizing operation in the Public Safety Pool, Conventional, from sites in and around Richmond, Virginia. The City of Richmond's system has been up and running for some time. According to information received by Sensus, the City of Richmond has in excess of 500 devices operating on its system.

The first lesson from this case study of the City of Richmond is that **the spectrum allocation system worked.** Channel 16 became available because existing FCC rules requiring construction and placement into operation caused KNKV222 to be cancelled. The City of Richmond or its advisor likely utilized the FCC's ULS to identify the fallow spectrum, such public record being made available via existing FCC rules. The City of Richmond applied to the FCC pursuant to existing rules. The City of Richmond sought and obtained waiver from the FCC, again under existing FCC rules. The City of Richmond got a license, also under existing FCC rules. The City of Richmond operates today pursuant to that license.

The point of all this is that the Commission's currently existing rules successfully re-allocated fallow spectrum to public safety use. No change in rules, other than grant of a waiver request pursuant to FCC rule, was needed to get the City of Richmond its paging system.

The Commission already has rules in place to address fallow spectrum. For example, in order for the renewal expectancy to apply at license renewal, the NPCS licensee must demonstrate that it has provided "substantial service." See 47 C.F.R. 24.16. If NPCS spectrum is indeed lying fallow as claimed by the Petition, then "substantial service" most likely was not provided, and FCC rules already provide a remedy. A change in rules, particularly one that injects uncertainty, is not necessary to reallocate allegedly fallow spectrum.

Public safety entities can take advantage of existing FCC rules to obtain license assignment or spectrum lease, including via license partition or disaggregation. As stated above, Sensus supports a rule change to the extent necessary for public safety entities to be eligible to obtain spectrum via license assignment or spectrum lease.

### B. Demand is not as great as suggested by the Petition.

Three years have passed since the Bureau granted the City of Richmond's petition. The Bureau's grant surely serves as precedent for another public safety entity in Region 2 to do exactly what the City

of Richmond did. If the City of Richmond got a waiver for Channel 16, then surely, e.g., Dade County Florida could get the same waiver for the Dade County area. NPSTC surely must have advised its members in the Region 2 states of the opportunity or they could easily discover the opportunity from other sources. Further, as noted above, KNKV222 actually terminated in 2000 with the license being cancelled in ULS in 2001. In other words, for the last eight to nine years, this opportunity existed for NPSTC members in Region 2, and for the last three years, NPSTC members in Region 2 had good precedent to rely on to get licensed on NPCS Channel 16.

While Channel 16 has been free for the taking, no other public safety entity took it. This illustrates the second lesson from the City of Richmond: **Demand by public safety entities for this type of paging system is not as great as suggested by the Petition.** No other public safety entity in the states of Florida, Georgia, South Carolina, North Carolina, Virginia, Maryland, Kentucky, Tennessee, Indiana or Illinois, has come forward and obtained a license to do what the City of Richmond did. Ironically, KNKV222 covered Florida, which the NPTSC Petition and the City of Richmond's petition highlight as having been affected by the 2004 – 2005 hurricane season and for which commercial systems supposedly were inadequate.

For Region 2, the Petition is superfluous. For Region 2, NPSTC members just needed to put into action what the Petition claims they want to do. The first responders' lack of action speaks louder than words. Demand for this type of system is not as great as suggested by the Petition. If demand were as strong as suggested by the Petition, other public safety entities would be licensed on Channel 16 in Region 2. The licensing of just one system in Region Two indicates there is little interest.

The Commission should make spectrum allocations based on a sound, rational basis. A compelling need for spectrum must be shown in order for the Commission to rescind licenses and reallocate spectrum as urged by the Petition. However, the Petition relies on anecdotal evidence and

conjecture and fails to show such a compelling need. Indeed, the anecdotal history of the spectrum previously licensed under KNKV222 indicates that the public safety need is spotty.

## III. THE COMMISSION'S UPCOMING AUCTIONS ARE FASTER AND MORE RELIABLE AT RE-ALLOCATING SPECTRUM

As noted above, the Commission's current rules and procedures already provide mechanisms to reallocate spectrum. Another such mechanism is the Commission's auctions. The Commission recently announced Auction 87, in order to auction, among other things, certain 900 MHz paging channels that currently are not licensed. This spectrum truly is lying fallow and hopefully will be placed into use subsequent to Auction 87.

Sensus also recently urged the Commission to re-auction 900 MHz multiple address system (MAS) licenses and other two-way 900 MHz spectrum that has been reclaimed or was not auctioned initially. Comments of Sensus USA Inc., In the Mater of Implementation of Smart Grid Technology, GN Docket Nos. 09-47, 09-51, 09-137. There are numerous MAS channels and other 900 MHz channels that truly are lying fallow and could be placed into productive use once auctioned.

The FCC holds a large number of MAS and other two-way 900 MHz licenses in many markets because the licenses were never bid on at auction or have been reclaimed due to failure to construct. Many of these licenses are BEA based and in most cases would offer coverage requirements similar to the geographic jurisdiction of most public safety entities. In some cases, two or more BEAs would be aggregated to cover the public safety entity's geographic requirements. The BEA market structure perhaps is better suited to allowing individual public safety agencies to make their own determination of spectrum needs in each particular jurisdiction. As noted above, what worked for the City of Richmond apparently was not sufficiently attractive to other public safety entities in Region 2. Consequently, most of the spectrum previously licensed under KNKV222 has lain fallow even though it was available for public safety use. Auctioning of BEA based licenses would allow each individual public safety entity to decide for its own jurisdiction whether to participate.

Sensus believes that the Commission could take this kind of incremental action relatively expeditiously without any particular concern for unintended consequences. As discussed above, Sensus believes there would be significant unintended consequences flowing from any abrogation of FCC rules and confiscation of licenses. Given the likely legal challenges to license revocation, public safety entities would find participation in auctions a faster and more reliable route to obtaining licenses than if the FCC were to revoke licenses using extraordinary measures.

In conclusion, Sensus urges that the Petition be denied except to the extent necessary for a public safety entity to be licensed in a service other than a public safety service, or to receive assignment of a license or lease spectrum.

Respectfully submitted,

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